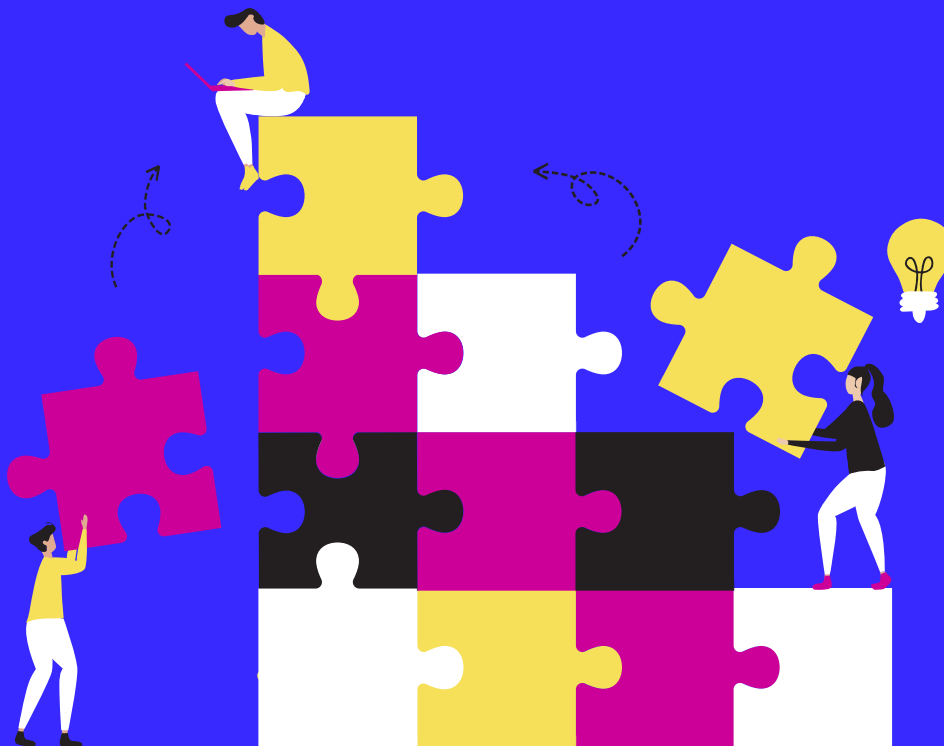




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**Future
Learn**

A pivotal point: the future of workforce development



Contents

Foreword	3
Summary	4
Introduction	6
PART 1: A pivotal point	7
The changing nature of work and workforce development	8
Work is changing	9
The workforce development market is large and shifting	10
The rise of upskilling and reskilling	11
The obstacles	12
The new priorities	14
The landscape of the future	18
PART 2: Emerging growth areas	24
Challenges and opportunities of the four emerging growth areas	26
Skills assessment: how do I improve, if I can't define?	27
Supported career pathways: getting employees from A to B	29
Applied, collaborative learning: increasing sharing, uptake, engagement and self-motivation	31
Tailored learning: improving relevance and impact	33
How will our four areas of opportunity play out in the future?	36
Skills assessment	37
Supported career pathways	37
Applied collaborative learning	38
Tailored learning	39
PART 3: Recommendations	40
Recommendations for learning and development practitioners	41
Recommendations for organisations	44
Recommendations for policymakers	46
Top five things founders should do	48
Top five things founders should avoid	50
Q+A interview with Justin Cooke, chief content and partnerships officer, FutureLearn	52
Final words and acknowledgements	54

Foreword

As we emerge from the pandemic, assess its fallout in the workplace and look to recovery, business leaders are going to find themselves facing a dire talent and skills shortage. We knew this when Covid first struck: chief executives then saw such a shortage as one of their biggest business threats. The chances now are that it is becoming an even bigger threat, particularly in new digital areas, as this report shows. And it is arriving as budgets tighten like never before.

The clear need is to focus intensely on reskilling and upskilling. It is cheaper to develop than to hire. The wisdom of this approach is borne out by the 2021 L&D Global Sentiment Survey, now in its eighth year and published at the start of February. For 3,114 L&D voters from 95 countries, the answer to “What will be hot in L&D in 2021?” was a clear and unequivocal “Reskilling/upskilling”.

Yet despite knowing the value of and the need for reskilling and upskilling, for developing the existing workforce rather than looking for new talent from outside, many businesses are not putting it into practice with anything like the commitment that’s needed. “Training” is still siloed, it is often about box ticking content rather than true integrated performance development and skills gap identification is poor.

On the one hand, this means that many businesses need to move mountains if they’re to overcome the shortages they can expect. That requires significant internal change and also replacing some of their large, unresponsive learning management providers with new, more agile players.

On the other hand, it means that for such agile new providers there is a market that is wide open for development with opportunities at great scale.

Based on extensive research, this report explores the key trends, challenges and opportunities that lie ahead for learning and development practitioners, organisations, policymakers and founders. Workforce development is ripe for evolution. This report gives vital insights into the form that evolution can take, with actionable recommendations for business, policy, L&D leaders and founders.



Donald H Taylor
Chairman of the Learning
and Performance Institute



Nic Newman
Partner, Emerge Education

Executive summary

A pivotal point: the future of workforce development is based on research interviews with 50+ CEOs, heads of learning and development and policymakers. It explores the changing nature of work and workforce development and the shift from learning to performance.

It outlines four key areas of growth in the workforce development market and offers recommendations for learning and development practitioners, organisations, policymakers and founders.

1. A pivotal point

- The \$8.5tn global skills gap cannot be solved unless we rapidly increase investment into workforce development: it is better to upskill than hire
- The future of work is fast, boundaryless and service-based
- The future of workforce development is
 - Performance progress not content delivery
 - Embedded not siloed
 - Data-driven and strategic not reactive
 - Empowering employees not compliance focused

2. Four key areas of growth and progress

The learning and development market is large, it is open and it is ripe for evolution. Four key areas for opportunities and emerging new innovators are:

- **Skill assessors:** how do I improve, if I can't define?
- **Supported career pathways:** getting employees from A to B
- **Applied collaborative learning:** increasing sharing, uptake, engagement and self-motivation
- **Tailored learning:** improving relevance and impact

3. Top three recommendations

L&D practitioners	Organisations	Policymakers	Founders
Build relationships across the business, not just in L&D	Prioritise a learning culture: empower employees to learn for life and for themselves	Address the systemic inequalities that hold back development	Leverage external brand credibility
Be proactive and strategic: identify skills gaps and develop accordingly	Find tech players to implement strategy, subject to interoperability	Devolve for greater impact	Focus on ecosystem integrations
Develop your business and data skills	Centre diversity and inclusion in hiring and development	Set the rules of the game then back off	Sell to employers, build for employees

4. The risks of inaction

- **For L&D practitioners:** increasing irrelevance
- **For organisations:** increasing talent and skills shortages
- **For policymakers:** diminishing competitiveness in a global market

Introduction

Workforce development is key to the collective economic future and to the UK's global economic competitiveness and leadership. Before the pandemic, chief executives viewed the unavailability of talent and skills as one of their biggest business threats. Now, although the recession is increasing the availability of candidates to hire, automation is rapidly changing the nature of work, the importance of new digital skills is ever increasing and the skills shortage is widening.

It is cheaper to 'build than buy', to extend existing employee skills than recruit. Yet, when it comes to that critical reskilling and upskilling, many businesses are lagging behind. While at least \$240bn is spent globally every year on corporate training, only a small proportion currently goes towards technology and genuine upskilling and reskilling – and much of that is on the limited solution of e-learning content, often with a focus on generic compliance training, rather than understanding how to identify and tackle skills gaps.

While tailored content is still needed, it plays a diminishing part in a fast-moving, boundaryless and service-based global workplace. Workforce development must move on from working in a silo to being deeply embedded across the business and, crucially, from a focus on content delivery and learning to a focus on performance.

The learning and development market is large, it is open and it is ripe for evolution. Where large learning management system providers once dominated,

we are now seeing a wave of new and more agile players emerging to meet the growing needs of employers. The tools and products they offer include Learning Experience Platforms (LXPs), Massive Open Online Courses (MOOCs), assessment, performance management and talent marketplace platforms among other innovations.

This paper examines this new landscape, surveying the gaps, opportunities and emerging new innovators. We consider four key areas of growth and progress:

- **Skill assessors:** how do I improve, if I can't define?
- **Supported career pathways:** getting employees from A to B
- **Applied collaborative learning:** increasing sharing, uptake, engagement and self-motivation
- **Tailored learning:** improving relevance and impact

We explore the challenges and opportunities of these four areas, highlighting inspirational early stage companies that are giving shape to the future of workforce development.

This paper is based on research interviews with 50+ CEOs, heads of learning and development and policymakers and, throughout, we present compelling stories that illustrate the changing nature of workforce learning and development.

Finally, we offer recommendations for learning and development practitioners, organisations, policymakers and founders.

01

A pivotal point

The changing nature of work and workforce development



The new thing is how fast we had to unlearn everything: relationship rules, communication tools, dynamics, power equations... all was disrupted in a night.

And this 'unlearning' ability is the future: we need space for experimentation, innovation and doing things better.

So let's unlearn!

Francesco Mantovani,
global learning technologies
and innovation director, P+G



TODAY,
A COMPANY'S
LIFESPAN RESTS
BELOW 20 YEARS

Work is changing

The future of work is fast moving, boundaryless and service based. We are increasingly unconstrained by physical borders, whether in terms of moving goods, services or talent. This more fluid talent continuum offers the potential for efficiency and creativity in composing a workforce but also more complexity. Jobs are no longer as fixed as in the past with a move from hierarchies to project teams and tasks, to increased specialism and a focus on expertise, not just experience.

Companies are also less fixed – literally. In 1958 the average company in the S&P 500 Index remained there for 61 years. By 1980, the average tenure

plummeted to 25 years. Today, a company's lifespan is less than 20 years. Companies are now increasingly valued by their intangible assets in a service economy: as a measure of company value, intangible assets were 20% in 1975, now they're over 80%.

However, intangible assets and service products are far more susceptible to competition than manufacturing, with lower barriers to entry. In an era of intangible assets, the key differentiator between businesses is people and the IP they create. Technology gives a short lead but rapidly becomes a commodity as its use spreads and prices drop.

The workforce development market is large and shifting

At least [\\$240bn](#) is spent globally per year on corporate training, and budgets have been trending upwards. However, in most organisations, only a small proportion currently goes towards technology and genuine upskilling and reskilling. Just \$20bn of the \$240bn is spent on digital learning solutions. The average total training spend per employee is just under [\\$1500](#) per year.

Many of the existing workforce development solutions are still scratching the surface in terms of market penetration. One of the largest providers, Cornerstone, has 75 million users, LinkedIn Learning

has 14 million, and Degreed has only 250 clients and 4 million users. A large part of the workforce is unserved by any digital learning service provider.

Even before Covid, according to the [LinkedIn Learning report 2020](#), the proportion of training budget spent on digital learning services has been increasing, while the proportion of in-classroom, instructor-led training has been decreasing. This all points to a corporate market ready to embrace new ways of learning but not currently provided with innovative, effective ways of upskilling and reskilling.



AT LEAST
\$240BN IS SPENT
GLOBALLY PER YEAR
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TRAINING

THE COST OF
RECRUITING CAN BE
\$30,000 OR MORE

The rise of upskilling and reskilling

It is non-controversial that promoting internally can be less costly than hiring new talent, which can cost as much as six times more. [Josh Bersin lays out the economics:](#) the cost of recruiting a mid-career software engineer (who earns \$150,000–200,000 per year) can be \$30,000 or more including recruitment fees, advertising and recruiting technology. This new hire also requires onboarding and has a potential turnover two to three times higher than an internal recruit. By contrast, the cost to train and reskill an internal employee may be \$20,000 or less.

The internal hire also has a lower likelihood of [churn](#), is likely to perform better [sooner](#) and requires a lower salary. They are also – crucially – more likely to be a good cultural fit to the company. Learn In, a new upskilling-as-a-service startup from David Blake (former founder of Degreed), offers extensive [cost-benefit analysis](#) on this topic, in the context of promoting ‘learning leave’ over layoffs.

[Research](#) by the World Economic Forum, BCG and Burning Glass Technologies also shows that employers alone can reskill 25% of employees. With government support that rises to 77% of employees with a positive cost-benefit balance.

Industry and government are increasingly acknowledging and promoting the importance of upskilling and reskilling.

Upskilling is the focus of the government’s recent [Skills for Jobs white paper](#) and reskilling and upskilling ranked top in the [2021 L&D Global Sentiment Survey](#). During Covid, LinkedIn research shows that workers are spending more time learning (130% increase), more L&D leaders are prioritising reskilling (64% see it as more of a priority now than ever) and CEOs are championing L&D harder (159% increase).

The obstacles

Against the growing imperative for employee upskilling and reskilling stand a series of overarching obstacles. The mindset of the industry and tech infrastructure is still dominated by traditional, siloed HR solutions, with a disconnect between learning and recruitment / talent mobility. Many companies lack clear L&D strategies and mechanisms to empower and incentivise greater investment in workforce development. L&D is effectively isolated from the business when it could help solve some of the most pressing issues the business faces.

Learning solutions have historically been focused on core HR infrastructure and content, driven by administrative and regulatory needs, creating barriers to entry for smaller players:

For decades the main players have focused on automating and simplifying HR core functions. Huge organisations like SAP, Oracle and Workday have become the core engines of process and guardians of HR data while players like Skillsoft and Cornerstone have owned the content and learning management infrastructure.

This monolithic approach to the processes and data around learning has made it difficult for these vendors to respond to user needs. It also risks smaller vendors, capable of offering niche solutions, being effectively locked out of participating in solving business needs.

“The big platform providers have to become more agile and flexible when it comes to customer needs. It seems businesses have to adjust their processes to platform processes and not vice versa. Iterations or changes take too long, if possible at all. Some companies therefore choose younger or smaller providers as they think they get better flexibility and service and accept other service gaps. Providers who truly connect technology across the employee lifecycle and offer an employee-centric experience are hard to find. The future belongs to systems that build processes based on user experience and not HR processes.”

Julia Menninga, competence manager, Volvo UK

The emphasis on content and learning has neglected skills acquisition and delivery of career and measurable business outcomes:

Learning solely to meet compliance objectives in most cases fails to meet both employer and employee goals. When it comes to training intended to lead to behaviour change and skills development, if passive content and learning is detached from real work it is less likely to motivate and support employees. Meanwhile, percentage completion and consumption time metrics do not give employers meaningful oversight.

As a result, most workforce platforms are still seen as learning deserts or places employees come to complete last-minute tick box exercises. For employers, most workforce development remains far removed from the golden standard of measuring impact and value. At best, investments in this field are made to improve staff retention versus moving the needle on business outcomes.

The L&D and talent professions and leaders still lack time, prominence and influence:

While some learning leaders enjoy chief learning officer status and influence, most do not. Unlike counterparts in CRO, CMO or CFO roles, learning leaders still lack hard evidence and data on the impact of their work.

Companies often lack clear strategies and effective structures to promote workforce development:

While leaders are increasingly acknowledging the importance of upskilling and reskilling, company structures often paralyse this ambition. A lack of company-wide top-down strategy and incentives make it challenging to move from the 'buying' to the 'building' philosophy.

In parallel, departments can be siloed and relationships between HR, L&D, talent leaders and team managers complicated, leaving fragmented budgets and buyers. When it comes to purchasing decisions, buyers often lack basic understanding of skills they need the company to build and ways to assess technology solutions.

The new priorities



L&D teams often don't have the skills within them they actually need to move into the future because they're staffed with instructional designers and facilitators. I'm not saying that those roles are going to disappear, or that they're not important, because they have their place, but increasingly L&D also needs to upskill and reskill. The lack of ability to use data is a big gap when it comes to L&D. Teams are often just doing things without really understanding what the demand is, what's working, what's not working? How am I going to demonstrate impact?

Amanda Nolen, NilesNolen



**DATA IS THE
CURRENCY OF
DECISION-MAKING
TODAY**

The future of workforce development is performance, not content

Organisations invest in training for three reasons: compliance, short-term performance support and long-term capability development. While these remain the drivers for investing in skills and knowledge, they are no longer the only drivers behind workforce development. The changing nature of the future of work has meant that every part of an organisation has become less boundaried. For example, marketing works more closely with sales, using the language of data to measure impact (a marked improvement on Wannamaker's adage). Production works more closely with inventory

and logistics, leading to lower-cost production through just-in-time inventory. And operations works more closely with IT, demanding data to make decisions.

In this world where boundaries between departments are overlapping, the focus of L&D shifts from developing skill and supporting performance at a *distance* to a focus on the performance of employees within each department. The common thread in all of this is data – the currency of decision-making today.

The new role of workforce development: skills, talent and managers

With the new focus of the L&D department on performance rather than learning, it will be crucial to define skills, identify skills and link them to performance.

-
1. Higher quality recruitment with better onboarding

 2. Better honing of skills on the job

 3. Clearer career options and hence more internal recruitment

L&D and learning tech will be involved in each of these.

Combined with the boundaryless workplace, we will see the growth of talent pools and talent marketplaces where individuals move in and out of work, or across different types of employment. Some talent marketplaces will be run by companies, others as independent entities and some, potentially, as workers' cooperatives.

Data about employees' skills, qualifications and experience will flow between talent marketplaces and employers. Individuals will want to invest more in their skills development, and training *with recognisable* results will be a major part of the offering from employers to potential employees. The role of managers in linking skills to performance and assessing the impact of a knowledge team will be increasingly critical. As the role of the manager shifts from the 19th and 20th century hierarchical model of control and moving information up the chain, the role of L&D and tech is to support them by helping them to coach and providing good, actionable data around team and individual performance.

“AWS has a Shared Responsibility Model that clearly identifies the security responsibility for AWS and the customers. The cloud can only be a secure place if both parties follow best practices. Based on that model we created the Shared Learning Responsibility model for our professional services consultants. We are not responsible for their ‘learning’. We are responsible for the most effective conditions. They are responsible for active participation, application on the job. We don’t define learning as a course or content. Our responsibility is to find the most effective solution (sometimes a course is part of it) to enable performance. This is only possible if the role of L&D is more embedded in the business.”

**Zsolt Olah, manager, digital learning and experience workforce development,
Amazon Web Services, WWPS**

Given these developments, we can identify the following new priorities in L&D:

Metalearning

L&D is shifting focus beyond primary and secondary skilling to include habits and mindsets, towards developing curiosity and a growth mindset and away from pushing courses and resources.

Shaping a positive, supported learning culture

Successful organisations are learning organisations. To develop that organisational learning culture, L&D, supported by leadership within the organisation as a whole, needs to build a positive, supported and safe environment for individuals and teams to learn in, ensuring that employees have:

-
1. Time to learn and time to reflect on what they have learned

 2. Resources to learn from

 3. Support when learning

 4. Understanding of how to learn, recognising that this can be done within the flow of work

 5. Knowledge that what they are learning is valuable to – and valued by – the organisation

Data conversations

Increasingly, L&D needs to understand the business on its own terms, using not just the language of business but also the data of business to recognise performance gaps and show how learning interventions can bridge them.

Management mentoring and coaching

The organisation-wide benefits of mentoring and coaching managers – the people closest to the people doing the job – needs to be recognised. These are the people who should understand what the good job looks like, know when it's done badly and, through coaching, understand how to help people get better at it.

The landscape of the future



Workforce development needs to be built in the same way that people learn in their day to day lives. They need to be able to find the right thing, in the same way that they can search for an answer on YouTube or Google, and be able to apply it instantly. Learning shouldn't be separated from work or pushed to a few days a month. Learning should be a continuous process.

Amanda Nolen, NilesNolen

Based on shifts we have identified through interviews, research and case studies, we see the following six key trends for workforce development looking towards 2030. In the next section we will show how they play out in relation to the four areas of emerging growth and opportunity.

1

Technology as an underpinning enabling force

The pandemic forced L&D to embrace technology and move to digital delivery at a speed that would hitherto have been considered near impossible. Technology is only going to play a greater role going forward. Digital transformation has placed L&D under the spotlight and by 2030 it will have moved far beyond simply replacing face-to-face classroom sessions with online sessions, as we see a fundamental shift from transferring learning to transforming performance. Digital will run through all L&D work as an enabler, providing equal access to upskilling and reskilling.

However, technology is not a magic wand that will fix all problems and it comes with its own challenges, from equity in relation to access to devices and data to gaps in the digital skills of the learning and development community itself. Digital transformation also needs to be supported by a shift in culture and organisational structure. Nonetheless, we are in no doubt that technology will be at the heart of workforce development in 2030.

2

Learning in the flow of life

One of the fundamental changes that technology will enable is to embed learning more effectively and engagingly into the way people live. Learning will become pervasive and seamless rather than a separate activity. Learning in the flow of work will mean that no longer will ‘training’ or ‘development’ be an activity requiring employees to stop what they are doing and make a dedicated effort, whether physically or digitally, to switch to it.

“If you’re at home on a weekend and something goes wrong with your plumbing and you need to be able to do something quickly, where do you go? Nine times out of 10 the answer is I go into Google or YouTube, type in a search, find the video, watch the video as I’m tinkering. And that’s the real world; that’s not outside work, that is just learning. But the trouble is, it means learning departments have to let go; we have to go, ‘it’s not about us”

Nick Halder, senior director of talent at Snow Software

However, learning in the flow of work is not straightforward and by no means an inevitable outcome. It requires the work tool/platform of the employee to understand the context. Why is an employee stopping the work? How can we understand the problem the employee is facing? How can we help the employee understand how to solve the problem quickly?

Learning for life at Samsung

There’s a big move towards learning for life, not just for work. It’s a shift away from learning to improve competencies so you can be who your business needs you to be and towards purpose-led learning that unlocks the potential in us all. We need to provide learning in the flow of life, not just the flow of work. Learning technologies have helped us connect the learning with the flow, just like digital marketers have been so adept at doing.

We launched a wellness app at Samsung. It has tools like yoga, meditation, stretches and calm breathing exercises, all of which support mental wellness and can be described as preventative. However, it also has a virtual coach, so if you’re in difficulty you have access to support from professional psychologists who can help in a crisis. Most importantly, it’s backed up by clear and consistent messaging in the workplace and

education programmes that support awareness.

There are touch points, where you can log how you’re feeling – tired, happy, content etc. We found the data from this really interesting as it provided information trends in the moment as to the average mood of our people. Interestingly, it also showed us the most popular time to use the app was Sunday afternoon. Not working hours.

We need to start giving people the inspiration to begin a journey of lifelong learning. If you’re able to give people access to learning resources that are so good they want to download them onto personal devices and use them outside work hours, you’re onto a winner.

Rob Peacock, head of learning and development at Samsung Electronics

3

Data and AI for personalisation

Within the workplace, learning in the flow of work will be enabled by personal artificial intelligence (AI) support, available not only for support with immediate tasks but also with future development – capability building for the future. Data and AI will underpin personalisation, better enabling employees to access information that is most relevant to them at their time of need, and in the format they prefer, as well as tracking progress to develop a constantly evolving and personalised learning pathway. At the organisational level, there will be a much faster turnaround of real-time data collection, analysis and action in response to this data, in contrast to quarterly big data reports.

Microlearning at Etihad Airways

In August 2019, we had 44 team members turnout for training; in August 2020, we had 4035. We take a microlearning approach. We have weekly Wildcard Wednesday Webinars using Teams, Kahoot and PolleEv, with speakers from places such as NASA, attended by hundreds of our people across the globe – from 74 different locations in the most recent one.

We also have one of the world's biggest WhatsApp groups – more than 8,000 members split into 250-member sub groups. We send out learning five days a week, such as books, articles, videos

and if they like a topic we give them the option to do events or even enrol in a more formalised leadership programme or development programme.

Then we use the Axonify app, which uses artificial intelligence to measure microlearning by asking multiple choice questions and checking confidence levels. It's a very nice little tool that provides some really great data.

Andrew Stotter-Brooks, vice-president learning and development, Etihad Airways

4

The rise of behavioural science

Data and AI will also underpin the use of behavioural science and the ability for managers to coach people and executives to pull out information across coaching interventions. Better monitoring and tracking will make it easy to see how effective the coaching interventions have been – or not. There will be much more of a focus on behavioral and cognitive science generally: what we do and how we think. This represents a move away from the current emphasis on the ‘how does our brain work?’ interests of neuroscience.

5

Coaching, mentoring and management

Coaching, mentoring and management will see a resurgence. As learning becomes more embedded in work and life flow, increasingly the role of L&D will be to help managers do their jobs better, not to treat training as something external to activities in the workplace. Digital tools will enable this to scale up.

Self-actualisation at Snow

My aspiration for learning culture in Snow is that Snow doesn't need me. I see my job as almost getting everyone to that point of self-actualisation where they're doing it for themselves. They know where they are, they know where they want to be, they know that in order to get there, they need to do stuff.

My job is not to try to figure out what it is they need to learn because they know what they need to learn. My job is to figure out how I make it easy for them to access the things that they need to learn and develop a continuous growth mindset so they're making space within the discussions to think about future skills as well as current skills.

The single biggest difference maker I've ever found throughout my career is working with managers and individuals and training them how to be coaches. It's getting them to the point where they understand that being a coach is not about having the answers, it's not about providing the answers, it's not about judging the other person for whatever their answers might be; it is simply to be there, to listen, to ask good questions and give them the space and challenge them to think for themselves. And if you do that, they will come up with their own answers.

Nick Halder, senior director of talent at Snow Software

6

The changing role of learning and development

“The role of the senior learning leader is to understand the context that they themselves are working in, the context that the company is operating in, the priorities of the company, and then to align what they’re doing against those priorities, whether it’s delivering new skills, whether it’s delivering greater efficiency. It’s making a strong case for how your learning organisation can support that.”

Simon Brown, chief learning officer, Novartis

Learning and development will become ever more focused on business aims, moving out of the ‘training ghetto’ and becoming far more integrated into the business. Increasingly it will take an enabling and procuring role, enabling the core business of the organisation through training and data and procuring services from outside the organisation. Empowering people to learn and supporting them as they do so will replace the traditional L&D tasks of creating and delivering courses.

With learning and development’s core task moving to performance, enabling managers and embedding learning in the flow of work, content will cease to be king. There will still be a role for curating and signposting content but there will be minimal need for learning development to concentrate on creating and providing content for learning when their role is to facilitate it.

Committing to curiosity at Novartis

Since 2018, with a new CEO, we set out to evolve our culture, including a focus on curiosity – giving people the best opportunities to learn and develop. It was backed by £100 million investment, over the next five years, and a commitment to people being able to spend 5% of their time, 100 hours a year, on learning and being curious. We’re now transforming the learning organisation to support all Novartis associates around the world.

Of course, 100 hours is an aspiration, not a performance management target, and the company is encouraging people through many formats. We’ve got ‘leader and influencer’ playlists where people are recommending learning. There’s gamification and internal viral campaigns where people tag other

people with “think you’d be interested in this session”, or “here, these are the three sessions I’m attending, which three will you attend?” It creates excitement around learning. A buzz.

It’s ambitious. When we started, the average learning time was 22.6 hours. Between 2018 and 2019, we saw a 58% increase and a further 28% last year. We have terrific learning resources available and we’re encouraging people to spend time thinking about their development goals and investing in the learning opportunities to help achieve them.

Simon Brown, chief learning officer at Novartis

02

**Emerging
growth areas**

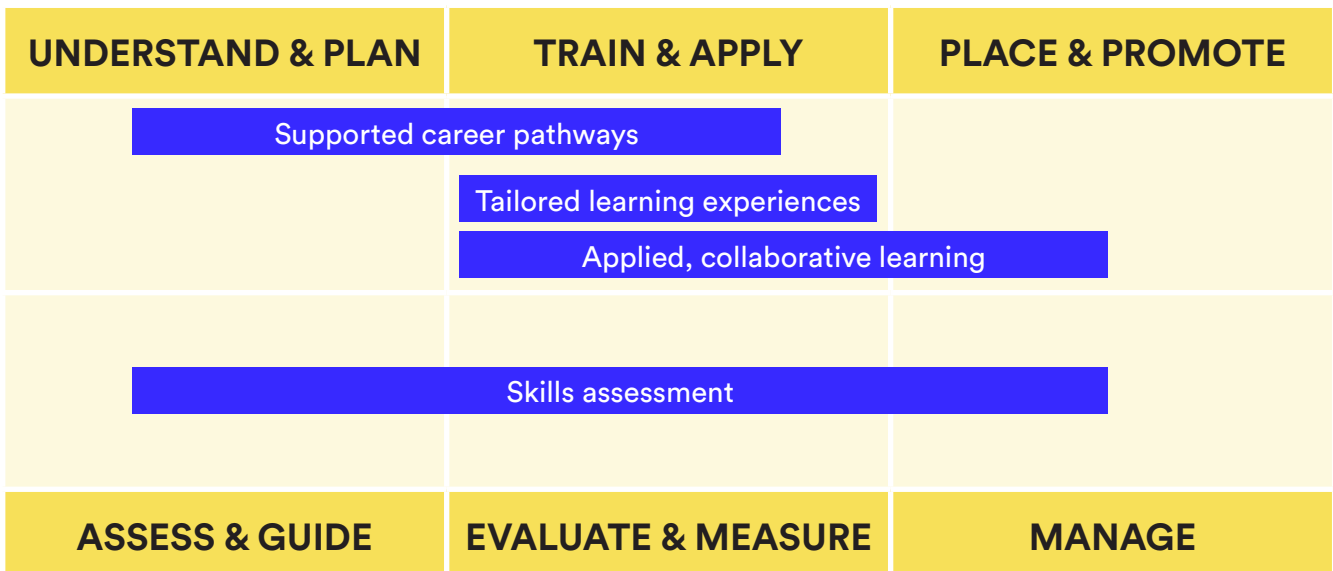
Of the myriad tasks learning and development practitioners undertake within an organisation, in this paper we are focusing on the six where we see the opportunity for most exciting change, and greatest potential impact for learning development in the future:

- understand and plan
- learn and apply
- place and promote
- assess and guide
- evaluate and measure
- manage

Against these core tasks we suggest four key categories for the future of workforce development where we see exciting developments. These four areas of opportunity are:

- **Skills assessment:** how do I improve, if I can't define?
- **Supported career pathways:** getting employees from A to B
- **Applied, collaborative learning:** increasing sharing, uptake, engagement and self-motivation
- **Tailored learning experiences:** improving relevance and impact

The future opportunities for workforce development



Challenges and opportunities of the four emerging growth areas

Skills assessment: how do I improve, if I can't define?

Challenges: learning and talent leaders still struggle to understand the granularity and breadth of their employee skills

- You can't improve what you can't define.
- Having a more robust way to better understand existing workforce skills is a key ask from L&D and corporate leaders. Yet it is the foundational block and biggest gap in the workforce development chain. Self-assessment and manager reviews are an important component but they come with limitations and blind spots.
- Skills are hard to measure and take time and effort to maintain.
- Creating and updating competency frameworks for each employer and situation is time consuming. Unlike financial metrics, skills are hard to define, measure and agree on and they get old and evolve quickly. Allowing employers to issue microcredentials is a step in the right direction but creating and awarding badges has, to date, often been manual and time consuming.
- Most assessments today are one-offs and new talent hiring focused.
- Testing today is largely non-granular, irregular and intrusive. Think of performance reviews, poor multiple choice tests (have a look at [LinkedIn Skill Assessments](#)) or long certification tests you need to study months and years for (eg CFA, ACCA). Many assessment companies are thriving but are still focused on evaluating new rather than existing talent.

YOU CAN'T
IMPROVE WHAT YOU
CAN'T DEFINE

Opportunities: making it easier to more accurately, flexibly and frequently assess employee skills


- Improving ease and robustness of skills measurement.
- There is a lot of potential to make skills assessment more robust to help managers not only understand employee starting points but also how their skills have improved. This could be done using granular and authoritative skills taxonomies and higher order microcredentials informed by employers. They could also be backed by external sources of authority (such as universities, accreditation and examination bodies, leading software businesses).
- Non-invasive automated assessment and evaluation.
- After Google and our social networks, our employer is probably the organisation that knows us best, given the amount of time we spend with it and information we give and receive. In the future we expect to see integrations with workflow tools such as Slack and Microsoft teams that can prompt 'micro-assessments' in the flow of work. Datasets collected through platforms such as Salesforce, Github and LinkedIn could be great starting points to non-invasively assess and evaluate skills and performance progress, perhaps starting with careers that are rich in data like coding or sales.
- Human feedback on the go.
- We shouldn't have to wait until a year end review or ineffective 360 degree feedback sessions to speak to our manager and understand how we are doing. While automatic data-driven feedback still has a long way to go, humans will always play a role in employee development. Solutions should make it easy to seek and give feedback in the flow of work.

THERE IS A LOT
OF POTENTIAL
TO MAKE SKILLS
ASSESSMENT **MORE**
ROBUST

Supported career pathways: getting employees from A to B

Challenges: untangling skills definitions and taxonomies and a greater availability of learning sources are not a guarantee of career progression

- There is a lot of learning out there and not a lot of results.
- Most solutions on the market are still about online or offline content. Employees don't want to simply tick another box, read another article and finish another online course. They want to see their efforts translate into better work, new titles and higher income. Digital content alone is not the silver bullet and neither are performance management frameworks.
- The wealth of skills data isn't meaningfully connected yet.
- LinkedIn (hiring) and Oracle (CV screening) are leading HR behemoths that sit on a ton of skills data but have not done much yet to connect it. IBM Watson, Burning Glass and EMSI have done incredible work to demystify skills taxonomies and to understand macro skills trends to inform staffing plans, but gaps persist on a micro level in building employee-focused progression ladders.
- Data alone is not enough.
- Learning you are a 60% likely fit for a new job, with a few upskilling courses recommended to you, based on a data algorithm, isn't going to get you far in life. Every human has their own circumstances and preferences and automated career recommendation and guidance approaches in isolation, alongside data limitations, devalue the individual and fail to make a genuine impact.
- Improved skills still don't equate to outcomes.
- In the same way recruiting is still fundamentally biased and flawed, so is career progression, especially in large corporations. If you don't know the right people and have opportunities to show your skills, you could encounter problems with internal mobility.



**WE NEED A HUMAN
TOUCH TO HELP US
NAVIGATE CAREERS**

Opportunities: improving our understanding of relationships between skills and roles and supporting targeted career pathways and transitions

- Meaningfully connecting and unlocking the power of data.
- The next wave of big data solutions should help connect skills and create meaningful career progression pathway infrastructure. This means, for example, showing the exact progression of skills that project managers need to acquire to become product managers. This will have to consider levels of competency (eg how does the progression change if I'm a level two vs four project manager?), as well as industry and geography.
- Guided career progression pathways.
- We need a human touch to help us navigate careers. Where needs are more defined and outcomes are clearer, structured B2B corporate bootcamps could help elevate employees to promotions. Where direction is less certain and hands-on support is less needed, a guided mentoring and career advising touch could prove impactful alongside data-informed pathway scaffolding.
- Freelance gig marketplaces for for existing employees.
- Talent platforms are starting to pave the way for easier internal mobility by connecting employees with open positions. As they evolve, they could create modularised short tasks for existing employees, in the same way Upwork or Fiver help modularise tasks and work for remote and freelance talent, to help them prove skills, meet people on other teams and further expedite and democratise internal mobility.

Applied, collaborative learning: increasing sharing, uptake, engagement and self-motivation

Challenges: learning service provision is top-down driven with content-focused enterprise-level software solutions that struggle to engage the end user

- Learning is disconnected from company and employee needs.
- L&D leaders often focus on ensuring that employees have ticked all regulatory compliance training boxes. Learning targets and processes are set in isolation from real business needs and employee preferences. The department tends to focus on creating learning content which takes time to produce and has a short shelf life.
- Technology is built for enterprises, not employees.
- Because most workforce development companies do B2B sales, the product is tailored to L&D and corporate leaders (purchasers) and their managerial requirements and perspectives. The focus on getting five-year enterprise deals signed often neglects the importance of employee (end user) satisfaction.
- There is too much emphasis on formal structured learning.
- The relative importance of formal theoretical training and knowledge retention needs to be rebalanced against enhancing learning that happens through peers and on the job.
- There is a disconnect between ‘learning’ and ‘action’, ‘theory’ and ‘impact’.
- While learning today is more active and informed by examples, there is still a big divide between what employees are learning and what they need to do on a day to day basis. There are also limited opportunities to practice and apply new skills in real world or simulated settings and to understand the impact of learning when ‘learning’ is often seen as a metrics-poor black box.

Opportunities: make solutions more bottom-up driven, unlocking the interest and wisdom of employees while empowering them to apply what they learn and validate impact on the go

- Making learning more fun, granular and employee-centred.
- Creating employee-centric platforms isn't about adding a comments feature in your LMS or 'gamifying' your learning journey by making people collect gems and diamonds. It's about creating simple, accessible, intuitive, modular and employee-informed software that encourages people to come back for more and empowers them to 'learn in the flow'. Engaged active usage is greater than the number of boxes ticked.
- Empowering employees to learn from one another.
- For specific questions and situations colleagues will often be the best teacher and source of insights and motivation, being much closer to the problem than expensive external parties. There is an impact and business case for unlocking internal skills, advice, learning content and knowledge creation from the ground up, especially in larger companies.
- Learning on the go and through applied work.
- True 'learning in the flow of work' should not mean stopping work to learn but 'just in time learning while doing'. It entails solutions that offer opportunities to learn and get feedback while continuing existing work or applying learning in realistic simulated environments.
- Helping better understand the impact of learning.
- Marketers improve products through constantly running A/B tests. C-suite leaders use clear metrics to measure business performance. Workforce development solutions should also empower clients to define the tangible granular outcomes they are hoping to achieve. The cause and effect equation will never be perfect but the more smart experiments and quick feedback loops companies can run, the faster we can elevate the importance of learning and the influence of L&D leaders.

“L&D is the last great unmeasured spend in organisations. There is still a perception in the market that L&D is something where you just have to grit your teeth and spend a percentage of budget. However, through our annual surveys, we are seeing a change in appetite for measuring — in 2017 just 35% of those surveyed felt pressure from leadership to measure. In 2020 this number has gone up to 65%. Our customers are getting excited about what a significant strategic lever they have as it plays directly to the skills agenda as well as the competition for hiring and retaining good people.”

Piers Lea, chief strategy officer at Learning Technologies Group

Tailored learning experiences: improving relevance and impact

Challenges: third party learning platforms are tailored towards the mean and lack features and specificity to build strong impact, loyalty and pricing power, while organisations and L&D teams sit on a wealth of knowledge they are unable to efficiently leverage

- Most platforms prioritise breadth, while bespoke support is unscalable.
- No one ever goes to a shopping mall for the best meal of their life, yet most content platforms today are like shopping malls. They are generalist, prioritising breadth and mass market appeal, leaving many lacklustre and few ecstatic users. At the other extreme, many specific solution providers end up being victims of their clients' bespoke needs and fail at rapidly scaling.
- Mass market content and distribution is a race to the bottom for startups.
- It is impossible for founders to compete with [LinkedIn Learning](#) and [Cornerstone OnDemand](#) on price per user, starting at \$6 per month and going down from there. Cheap, generic video content is an L&D manager box-ticking exercise pleaser with high entry barriers for anyone that wants to compete as a generalist content-based player. In parallel, partnering with big content providers and distributors too early, without having direct links with your customers, almost always downgrades your business ability to stand out, learn from customers, innovate and attract investors.
- Corporations are not built to be great training institutions.
- While 70% of L&D spend is on [in-house solutions](#), L&D teams don't have the capacity (globally, there is [one L&D FTE per 300 employee FTEs](#)), authority, skills and resources to create meaningful, structured ongoing learning initiatives over and above one-off training and compliance exercises.
- Internal academies often fail to deliver intended impact.
- Even for those organisations with the resources and organisational buy-in to create their own academies ([4,000 globally seven years ago](#)), these academies are [understaffed](#) (three L&D FTEs per 10k company FTEs), mostly for company leadership and often [fail to deliver](#) intended impact as training ends up disconnected from the day to day corporate strategy.

Opportunities: create specialist platforms and one-stop-shop learning destinations focused on specific skills, industries, roles, competencies and even large corporates

- Platforms made explicitly for skills and industries.
- For every Google (technology), Goldman (finance), Roche (pharma) or BP (oil and gas), there is potential for an equivalent gold-standard skill or industry focused learning platform. Learning to code or market products is a very different set of expectations depending on your industry. Industries and jobs with wide and growing knowledge remits, constantly changing skill and work requirements and high-impact decisions will likely have greater demand for such providers.
- Platforms made explicitly for roles and competencies.
- In the same way Pluralsight – see case study below – is the go-to place for developers (and commands a price premium, charging up to \$779 per enterprise employee per year), focused learning providers can become destinations for other specific roles and competencies. This could, for example, be tech sales, as one of the hardest-to-fill roles with a huge skills gap or management skills where US companies alone spend \$15bn on training.
- Pluralsight is a company that initially offered classroom training for software developers in 2004. As it pivoted to fully online in 2010, it experienced rapid growth, and through fundraising made a series of excellent strategic decisions and purchases that expanded its remit from a tailored content provider to a holistic solution across all four categories:
 - **Acquiring skills more effectively:** the first acquisitions came in 2013 as Pluralsight strengthened its position as a tailored learning provider in the developer space and supplemented it with tech training for creative professionals, through [PeepCode](#), [Train Simple](#), [Tekpub](#) and [Digital Tutors](#), followed by acquisitions of [Code School](#), [Hackhands](#) in 2015 and [GitPrime](#) in 2019 to improve the applied and collaborative components to the platform.
 - **Measuring better:** right after its first acquisition in the content space, Pluralsight purchased [Smarterer](#) in 2014, a crowdsourced skills assessment engine, and subsequently in 2018 launched its own [Role IQ](#), an accurate way to determine a technology professional's expertise level.
 - **Progressing faster:** the final pieces of the puzzle in Pluralsight's completion of the four quadrants came through the 2016 launch of an [Enterprise platform](#) with learning pathways, a series of supported career pathway partnerships with [Oracle](#), [Microsoft](#), [Adobe](#) and [StackOverflow](#) from 2017–18 and, most recently, with the acquisition of [DevelopIntelligence](#) in 2020, a company supporting business end to end digital transformation.

A new horizon in work-learning integration

Most solutions in the employer university collaboration space today help employers to inform university education or employees to go back to university studies. But how about solutions that recognise employee skills and internal L&D towards an externally validated university credential? This is the approach EY has taken with Hult Business School for its highly innovative 'EY Tech MBA by Hult'?

EY Tech MBA by Hult

At EY, our clients rely on the skills, knowledge and behaviors of our people to help them be more successful. The business environment and our clients' needs are changing rapidly, so we need to ensure that our people's skills are evolving at that pace too.

To do this we have built the EY Badges programme, to excite our people around learning skills of the future, in areas such as AI, blockchain and data analytics, as well as in curiosity, inspiration and innovation. We now have 100,000 EY Badges awarded, and many people learning to earn them. The badges are at five different levels, from simply Learning to Bronze (which requires double applying the learning in twice the hours), Silver, Gold and Platinum (which are awarded to world-class experts in their field).

In July 2020, we launched the EY Tech MBA by Hult. This is a fully accredited master's degree, offered to all of our 300,000+ people for free. To be awarded the MBA, our people will need to complete a number of EY Badges across Technology, Leadership and Business domains, complete papers showing how they have applied the learning from each badge, complete some additional essays, and finally

take part in a group capstone project. The overall time commitment is over 1,500 hours, and we have many of our people who are on this journey. We will graduate our first EY Tech MBAs in February 2021.

Our MBA is future-focused as it's based on EY Badges which are constantly updated curriculum. For example, we are releasing a series of badges on Sustainability, which will now be part of our MBA curriculum. The MBA is also flexible – our people can learn at their own pace, earning the MBA over several years if they need to. And finally, it is free for all employees – which democratizes what was previously only available to a few executives.

Hult International Business School reviews the curriculum that EY curates, reviews the underlying learning and processes that EY manages, and Hult professors mark the papers and Capstone Project. We're very pleased with our partnership with Hult and are now consulting with other organisations to help them with their reskilling challenge.

**Riaz Shah, partner,
Global Learning, EY**

**How will our
four areas of
opportunity
play out in
the future?**

1. Skills assessment

Assessment solutions of today are bespoke, hiring focused, subjective and big test-driven

Consultancies such as Korn Ferry and DDI have built large successful businesses focused on supporting enterprises in creating skills frameworks. Businesses such as Pymetrics, Codility and Code Signal successfully support recruiters to make more objective hiring decisions based on aptitude and technical skills. External bodies such as CFA, ACCA and corporations like Salesforce and Tableau have built their own standardised assessments, while Credly empowers employers to create their own badges to signal progress and motivate employees.

Assessment solutions of tomorrow will be more flexible and business outcome aligned

We believe there is space in the market for scalable solutions that empower employers to understand how existing employees are progressing in their upskilling and reskilling efforts and delivering against business outcomes. While self-assessment and internal credentialing can be great solutions, the lack of objectivity can be a limiting factor when making staffing decisions. Similarly, the well-established tests can be inflexible, while authoritative assessment for many skills areas such as sales and product management are lacking. Finally, assessing for the sake of assessing, like learning for the sake of learning, has limited value unless it can be tied to intermediate and end business outcomes.

2. Supported career pathways

Today's solutions define and untangle skills, while offering skill-informed content and learning pathways

The pioneers in this space, including Burning Glass, EMSI and IBM, have helped employers and governments demystify and understand existing skills and future skill needs thanks to extensive skill databases and taxonomies. They give employers and employees the taxonomy and tools to understand more about themselves and their opportunities. Separately, content providers and curators have created skill-informed content and learning pathways that help take you from no to some knowledge of a topic, including Udacity's nanodegrees and EdX pathways.

Tomorrow's solutions will show relationships between skills and roles, while providing facilitated role-aligned career pathways and transitions

Today it is still not crystal clear how roles relate to one another, how content X relates to content Y, nor how content and learning pathways facilitate role progression. To demonstrate greater impact and to experience greater uptake, skills taxonomies will have to show how role demands are changing and relate to one another, and training solutions of the future will have to actively use this information to move people from A to B. This means solving problems for employees who want to move from role A (eg database administrator) to role B (data analyst) and for employers who have employees in group A (eg product designers) that need to shift to group B (eg product managers).

3. Applied collaborative learning

The learning of today is more practical and flexible

The sector has made a slow move from passive to active learning with practical experience. 30% of Simplilearn's learning model includes hands-on applied, project-based work. Bootcamps have long been piloting 'learning by doing philosophies', including Trilogy Education in the US and Makers in the UK with more recent forays into B2B. Walk Me supports learning on the go through digital transformations, while Edcast has been an early pioneer of learning in the flow of work.

The learning of tomorrow will be more applied, immersive and inclusive

The next generation of workforce development providers will further move from learning through examples to learning by doing real tasks or simulations. While learning through exercises is a good starting point, learning from real experience and mistakes is even more motivating and powerful. Top companies will acknowledge the 70/20/10 model for learning and development and aim to support more of the 70 (learning from challenging assignments and on-the-job experiences), instead of just the 10 (learning from coursework and training), while creating environments where employees can collaborate, share feedback and learn from one another. With equality, diversity and inclusion a top priority area for L&D and HR, learning and talent development need to be more inclusive to create opportunity and pathways for all and meet recruiting goals.

4. Tailored learning experiences

Today, employees have access to all of the content in the world

There has never been more enterprise learning content in the world. Leading MOOC players such as Coursera have popularised content from HE institutions, while Udacity has partnered with industry experts to build content. Lynda's expert-driven microcontent solution successfully sold to LinkedIn. Large LMSs like Cornerstone serve as depositories of corporate content and LXPs like Degreed help surface, recommend and personalise content and learning.

Tomorrow, employers will have access to learning made for them

Large generalist content providers and AI recommendation engines mitigate problems around access and engagement. Specialised providers, however, can build advantages by fully tailoring their learning environments. For example, Pluralsight, a platform made by and for developers, had a brand and experience advantage against generalist players where coding is one of the many offers. The scalable learning solutions of the future will feel like they are made specifically for your industry, for your profession and even your company.

THERE HAS
NEVER BEEN
**MORE ENTERPRISE
LEARNING CONTENT**
IN THE WORLD

03

Recommendations

Recommendations for learning and development practitioners

Change is optional. But so, too, is staying relevant. If you decide not to embrace a wider, more comprehensive, business-focused, and data-supported view of the role of L&D, then you are also choosing to remain the equivalent of an internal pizza delivery service. Expect to continue to receive phone calls and emails demanding courses that will have no impact. Expect, too, to be the first department to be cut when times are bad. After all, if you can't prove your value, why should you be kept?

Summary

- Build relationships within the business to contribute to its success
- Provide strategic input: diagnose performance gaps as well as solutions
- Develop your own business and data skills
- Explore tech solutions with an end user-focused approach

1

Accept it: we don't own the learning

As the borders between full-time, part-time and associate work, between countries and between roles themselves continue to blur – all thanks to the worldwide web – it is crucial to work on relationships with those outside L&D, in the business and beyond. We do not own the learning anymore. But we do have the expertise to act as a centre of excellence to coach and offer support on how to build a programme. Connecting people and combining L&D skill sets with functional expertise is where the magic lies. We need to look outside and bring it back inside the organisation.

But be aware that, as management thinker Tom Peters [warns](#), this takes time.

2

Learn how to use data better

Whether it is churn, turnover, [EBITDA](#) or something else entirely, learning how to use numbers and data in a way that understands the needs of the business and expresses it back in terms of what it can do is the key to having influence. If you don't speak the language you will be condemned to forever execute the will of those who do – and they care less about learning than you do. Ignore this and risk being stuck in the [training ghetto](#). Actively move towards a data-driven model for L&D while remaining alert to the legal and ethical dimensions of data use.

“I've coached a few chief learning officers, and consulted and worked with many more. One question I often ask is, ‘Can you read a balance sheet?’ That's a skill that senior learning people really need to have. You should have business acumen, you should have business capability, and not live in a bubble where you're designing, developing, delivering content – learning content – without really linking it through to exactly how this is going to impact the organisation [or] is exactly what the organisation needs.”

Charles Jennings, partner, strategy and performance, Tulser/70:20:10 Institute

3

Don't be a silo

The borderless future means distinctions between departments will continue to crumble. In particular, workforce development will have a huge role to play in the traditional area of HR: recruitment and internal talent mobility will be a place where L&D will need to contribute. Build relationships now with HR to understand the talent marketplace for your organisation, internally and externally. Integrate and partner across the business to build future success.

4

Think more

It is not enough to be a reactive producer of courses on demand. L&D needs to be proactive and help the organisation effectively diagnose the performance gaps, not just the solutions. To provide strategic advice to the business you need to build networks of smart people on social media and listen to them. Read, digest, debate and, above all, THINK. How will your future be different and what will you do about it? How will you work in a world where a person's role may be described in four different ways from morning to dusk, where they can be part of three teams at once but employed by nobody but themselves, where they can be based anywhere in the world and looking for work across it? That's our future. Think about it.

5

Embrace tech

Technology will help you. It may come from large vendors or you might choose to explore the vibrant marketplace of the startup community – small, agile firms likely to respond quickly to your requirements for change, and who are willing, indeed eager, to get your input into developing their ideas. Have clear guidelines for working with them. Make it clear that you're experimenting and you cannot necessarily commit your organisation to the first iteration of their product – then put them to work solving your skills and talent issues. Consider how any new tech will fit into your existing ecosystem and learning culture and prioritise interoperability. Always consider the end user.

“I look at where we need to be going in the next 10/15/20 years with how much is going to change, and we can forget the skills. You can acquire the skills, you can teach the skills; there are many, many ways you can get the skills into people. And let's be honest, if machines are doing most of the heavy lifting anyway, then what are the skills we're going to need people to have? We need to make it all about how you inspire that curiosity, that experimentation, that risk taking.”

Nick Halder, senior director of talent at Snow Software

Recommendations for organisations

The trends we discuss in this report are global and do not affect just L&D. In a world where barriers are breaking down, and work is increasingly knowledge-based, the value of your organisation depends on its people. You can continue to train them in the traditional way – by delivering courses online or face to face – or you can take a larger view of developing people, and extend it from recruitment through to exit and beyond, realising that a fluid, international talent marketplace has different, more complex demands. Dealt with well, this will generate greater competitiveness.

Summary

- Hiring in should be the last resort. Prioritise development
- Centre diversity and inclusion in your hiring
- Have a clear strategy for people development and how tech will help you
- Find leading tech players to implement strategy, subject to interoperability
- Build bespoke elements where necessary

1

Empower employees

Flip the development model to self activation. Empower everyone throughout the organisation to learn for life and for themselves. There's a clear organisational benefit in helping employees to do this – driving staff engagement and retention. Be clear about how committed you are to development in your recruitment adverts, and then deliver on your promises. If you don't deliver, your employer brand will be tarnished.

2

Think long-term

Your people are what differentiates and provides value to your organisation. While new skills will need to be developed quickly, focus on developing people over a long time period – think years or even decades. In the future, organisations will be drawing from, and contributing to, a wide and fluid talent pool. The gig economy will develop your workforce inside and outside the business. Aim to be an employer of choice that people will want to return to. Treat employment as a project-like engagement and be explicit about how you will deploy, employ and develop your workforce so that you are developing a long-term relationship with them that goes beyond your existing two- or three-year contract.

3

But accept churn

You don't own your talent. When people are developed, some will leave. In the boundaryless world of future work, this is inevitable. Some will come back, bringing more experience and value back with them. Expand your talent horizons – the workplace of the future has no boundaries. Development of people will be a minimum requirement and will attract collaborators to your brand – and will ensure your organisation creates pools and ecosystems of talent and ideas.

4

Use tech

Culture comes first – lead with a learning culture and find the technology to support it, just as employers like Lidl have been doing for years. Use technology to help you find, support and develop people at every stage of work, and in every direction. Push suppliers to enable tech interoperability – getting the data to flow enables organisations to get a better picture of their people and follow their people strategy even when using multiple tools; otherwise tech can constrain rather than enable.

Recommendations for policymakers

The mechanisms put in place to support the 19th century nation state are not suitable for the 21st century global economy. This paper provides some ideas about where the main challenges are, how they could be tackled, and some past policy mistakes to avoid repeating. We are at a fork in the road. Do we take the easier path of continuing with our existing structures or opt for bold change in a few areas, changes which can have a substantial effect on competitiveness and on people's lives?

Summary

- Now is the time to reskill for the post-pandemic future
- Address the systemic inequalities that hold back development
- Devolve for greater impact
- Build bridges to 'skills currencies' for more flexible, lifelong learning and working

1

Be bold

Now is the time to act and encourage. Workforce development is key to the global collective economic future, to the UK's global economic competitiveness and to a post-pandemic recovery plan. Support it with a sustainable upskilling strategy. Make L&D costs count as an investment on balance sheets or tax offsettable. Address the digital divide in a systemic way so that nobody is left behind through lack of access to a device or low-cost wifi.

2

But avoid grand gestures

Overarching, top-down initiatives often have unforeseen consequences (see the Cobra effect). If you incentivise training and measure it by hours delivered you risk stifling innovation in electronic mechanisms. Create the wrong policy instruments for apprenticeships and you may find that organisations rebadge existing training as apprenticeships to get a subsidy. Focus on, engage with and devolve to the regional level for greater impact.

3

Set the rules of the game then back off

Think strategically. For example, encouraging companies to report on their skills base and talent pool (as attempted in the UK Companies Act 2006) will help firms focus on this, and investors correlate workforce development with shareholder return. Build bridges to recognising qualifications. Codify and map them to clear and recognised skills pathways to give employees a “skills currency” that they can take with them when they change role.

4

Extend lifelong learning both ways

Adults in work were once children in schools. Create a system that encourages creativity and the development of a growth mindset in children from infancy. This emphasis on a well-educated workforce was one reason why Ireland was able to attract inward investment in the 1980s and greatly outstrip the UK in terms of GDP growth. Funding systems are critical.

Startup founders dos and don'ts

Top five things founders should do

1

Leverage external brand credibility

In a sea of self recognised 'award-winning' startups, find ways to leverage external credibility to jumpstart your brand.

The main sources of external credibility include: practitioners, influencers, academia and big name clients, with various levels of potential impact depending on your business. We would like to see more companies that leverage practitioners and influencers, which we believe is a highly relevant untapped source.

For example, while it's enjoyable listening to a professor's HBS social entrepreneurship Grameen bank case study, learning guerrilla tactics on setting up a challenger bank directly from Muhammed Yunus could be much more powerful. While there are a lot of great marketing content creators, many people would be better off learning growth hacking from growth hacking thought leaders like Andrew Chen.

2

Focus on ecosystem integrations

Make sure your product clearly fits within the broader HR and workforce development data and tool ecosystem and has an extended value chain vision.

Odds are your early stage product won't (and shouldn't) be solving the full value chain of your customers' problems. As such, don't expect your clients to replace their longstanding SaaS infrastructure and download new software. Integrate with existing systems and data through APIs, and minimise friction and time-to-value while maintaining an ambitious product vision that can deliver more value over time in the workforce development journey.

3

Traction and case studies trump IP

Client impact case studies with rough and ready prototype products eat AI pending patents for breakfast.

We see too many founders over-academising the AI behind personalised learning and wasting time on indefensible patents, while waiting too long to get customer validation. Depending on your focus area, big data and AI can be important pieces of the puzzle, but alone they are unlikely to be a game changer unless you are perhaps fortunate to have raised tens of millions as a seed company.

Focus on rough and ready prototypes and rapid feedback from early adopters, while improving technology as demand increases. A power-user case study showing how you have transformed a business can go a long way. Adding Fortune 100 company logos on your website for £5k trial contracts does not count.

4

Sell to employers, build for employees

You have two clients to satisfy: buyers are more important for the short run, end users for the long-run potential of your business.

It is incredibly rare to come across a workforce development product that employees can't get enough of. Unused learning budgets, products sitting on the shelf and a lack of time are the norm for L&D. This will change once founders start building more products with end users uppermost.

Strong pitches to buyers can open up big markets but even then only products that employees genuinely want to use will bring sustainable growth and help close the skills gap.

5

Be creative with selling

Workforce development is not just about selling to L&D leaders. Find ways to engage managers and the rest of the C-suite in the process.

We see too many companies banging their heads against the wall and complaining how selling to L&D/HR is impossible. Companies should find ways to speak HR leads' language and empower them to use the right language and questions to communicate benefits and understand priorities from C-suite colleagues.

In parallel, they should find ways to directly link with other leadership personas with a direct business interest in the product. This could mean selling a recruitment product as a foot in the door for HR or an indispensable tech tool for engineers. Research from BCG below shows that many C-suite roles are involved in a lot of purchasing decisions.

Startup founders dos and don'ts

Top five things founders should avoid

1

Content is not king

Most learning content today is a commodity and while specialised quality content can attract audiences, it cannot be seen as an end in itself.

Unless you are in the 'tailored learning experiences' category, it is hard to get excited by content, especially if you are directly producing the content. Most content is cheap, labour intensive and low margin.

Companies that find creative ways to unlock content using the expertise of existing employees, thought leaders, or even through celebrities, have an edge. However, in isolation, even the most specialised quality content providers will fail to produce big impact. Finding ways for incorporating assessment, applying learning and showing career progression is how strong defensibility is built at scale.

2

Do not build more LMSs

There are too many LMSs and the world doesn't need any more.

Please don't build more LMSs and say that you are not in fact another LMSs or LXP. There are 1,000 LMSs with 10–15 heavily funded ones. You can probably build a nice lifestyle business but you will not be creating a unicorn business in 2021. Having LMS features or integrations are a good enabler and nothing more.

3

Avoid partnering with distributors

Partnerships with large distributors can be a short-term quick win but a major long-term obstacle in building a defensible unicorn business.

In the early days, the best way to show your competencies and demand from the market is through direct sales. If you can't find your first five customers, the odds are you won't be able to find your 100th either.

Partnering with large distributors too early puts your company on the back foot, distances you from your customers and feedback, squeezes out your margins and commoditises your business and brand.

4

Do not over-tailor your product

Listen to your early adopters but, as you grow, beware of becoming a low margin consultancy.

Early adopter clients value innovators that are open to feedback and co-developing a curriculum or product. Listen to feedback but make sure you are finding the middle ground between tailoring to clients' needs (eg white labelling, adding feature options, integrating with existing content and software) and building a highly scalable product.

The cheaper your product the less you can support your client and the more clients you have, the less hand holding you have time for.

5

ROI is not the silver bullet

Being better at impact is great, but proving causality and bottom line results is difficult and often not necessary.

While most organisations list ROI of workforce development solutions as a top priority, what they really care about is finding ways to see and express progress. There are many ways companies can show positive impact, through defining and tracking of data and relevant metrics, without having to perform randomised controlled trials.

“Organisations are not really bothered by ROI – it is often used to kick ideas into long grass. What they really care about is performance, productivity and solving problems. Get a track record of helping companies solve problems – you don't need to show the maths every time. People always listen to success and praise.”

Donald H Taylor, chairman of the Learning and Performance Institute

Q+A interview with Justin Cooke, chief content and partnerships officer at FutureLearn



FutureLearn was founded eight years ago by The Open University, with the purpose of transforming access to education. Its mission is to meet the needs of the lifelong learner, wherever they are.

How does FutureLearn approach its own workforce development?

We operate in a very dynamic and exciting market. As we have all experienced, the demand for online education has seen incredible growth during the pandemic. FutureLearn has added another 5 million learners to our platform in just one year – we are now at more than 15 million – and are working hard to continue this level of growth in the next year. To facilitate this, our approach to workforce planning is informed by data and business imperatives. We leverage platforms such as Burning Glass and LinkedIn insights to identify skill gaps and see where those skills are available in the market and decide whether we go for a buy (hire) or build (internal talent, upskilling and reskilling) approach.

How are you supporting other businesses to develop their workforce?

Whether you are a FutureLearner, an employer or one of our almost 250 academic and industry partners, everyone is seeking advice on what they should learn or develop next.

We have access to an enormous amount of rich data which we use to help answer that question. Our data-driven curriculum development approach helps partners prioritise their learning development resources and focus their efforts on high-demand topics that are mapped to their strengths. Likewise, learners are looking to explore the skills that are the most in demand to help orient them towards investment in reskilling and upskilling, which can help them find attractive employment opportunities and progression.

Our Global Skills Index helps our partners and prospective partners (HEIs, industry and government) to identify the most pressing skills gaps, ideally ones that they are best placed to close. For example, we have used the Global Skills Index to identify countrywide skills gaps to help our partners prioritise their educational offerings for students coming from overseas.

We have also used the Global Skills Index to help individual industry partners explore the skills gap of their workforce and the relevant reskilling and upskilling development pathways.

What should learning and development look like in 2030?

We see three broad trends in how learning is evolving. Firstly, it is becoming more integrated with work. Secondly, it is becoming more personal. We are getting to the point where each individual could have a personalised diagnostic on FutureLearn to hone in on their goals and development, ideals and plans, and be able to map those against a raft of learning that can be really tailored to their specific situation. Geography, level, sector, market and relevance will all come into play to produce the perfect learning journey.

Thirdly, we are shifting towards lifelong models as we experience the end of the career path and the rise of the career portfolio. There's already much more awareness and acceptance that we'll all be on some form of lifelong learning journey. An organisation's biggest asset is its people and it needs to invest in them to keep them up to speed on new technology, tools and thinking, and that does not end at the point of leaving school or graduation. It's been accelerated over the last year with education experiencing a steep maturity curve. We've seen a boom in online learning and a proliferation of really exciting and relevant new technology. We now have a broader and deeper stack of tools to embrace and use to help us as individuals progress – along with the organisations we work within.

What advice would you offer a startup in the L&D space?

There are several challenges that the edtech sector has to tackle in this space. One has to do with rapid content development, the other with showing return on educational investment (be it to a prospective learner or to an enterprise client). The first challenge has to be addressed by rapid trend identification for new technologies and solutions for which training is required, as well as rapid development of high-quality content (which requires access to learning designers and experts, as well as scalable content production facility). The second challenge requires fresh thinking around proving the impact of learning on professional outcomes. It is complex because, frequently, the impact of learning is achieved beyond the short term and in a variety of ways that may not directly correspond to the individual's current career trajectory. For example, a business professional taking a UX design course could result in them securing an attractive post in a tech startup two years later, which is due to exposure to the product design knowledge evidenced in that course but may not seem like a direct consequence due to the time lag.

Final words and acknowledgements

The future of workforce development is now. While Covid has thrown in new challenges, it has created many new opportunities, while expediting the awareness of and appetite for technology.

In collaboration with FutureLearn and under the leadership of Donald H Taylor, chairman of the Learning and Performance Institute, we have been fortunate to work with and speak to more than 50 corporate leaders who are innovating in this field. There is still a long way to go but there is a shared sense of optimism in the space, coupled with broader acknowledgement of the role workforce development should have in organisations.

The future is not about content, it is about performance. It is not about siloed L&D and talent departments, it is about workforce development that runs across the whole organisation. It is not about boxes ticked and hours studied, but progress made and results achieved.

The last five years of technology innovation have started moving the needle in this space. It has supported employers and employees by increasing access to better learning resources and placing a greater emphasis on skills and more flexible, personalised learning resources and opportunities. But we are still scratching the surface. The future is about better measurement of skills, more effective acquisition of skills through tailored learning experiences and applied collaboration platforms, and solutions that help employees progress through their careers.

We greatly appreciate the time we have been given with the leaders, entrepreneurs and thinkers who are leading this new wave of workforce development innovation.

Future of workforce development board attendees



With particular appreciation to development board leader **Donald H Taylor**, chairman of the Learning and Performance Institute, and board sponsor **FutureLearn**, we would like to thank:

Ahmed Haque, former chief academic officer at Trilogy Education Services; founder and CEO of Didactic Labs

Alissa Dhaliwal, head of education and skills policy at CBI (Confederation of British Industry)

Amanda Nolen, learning strategist, edtech advisor, Niles-Nolen

Andrew Stotter-Brooks, vice-president learning and development, Etihad Airways

Andy Moss, managing director, corporate learning, City and Guilds

Bhakti Vithalani, founder and CEO at Big Spring

Brian Murphy, global head of learning and enterprise capabilities, AstraZeneca

Catalina Schveninger, chief people officer – FutureLearn

Charles Jennings, partner, strategy and performance, Tulser/70:20:10 Institute

Chinara Rustamova, senior policy advisor, the Federation of Small Businesses

Dan Sommer, former founder and CEO of Trilogy Education Services, co-founder and managing partner at 10XImpact

Daniel Okin, head of learning and development, Cabinet Office

Dawn Smith, capability manager at Jaguar Land Rover

Don Spear, president and CEO at OpenSesame

Donald H Taylor, chairman of LPI (the Learning and Performance Institute)

Duncan Dunlop, enterprise account executive at Coursera for Business

Hamoon Ekhtiari, CEO at FutureFit AI

Jason Rosenberg, managing director at Avathon Capital

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About Emerge

Emerge Education is a European edtech seed fund investing in world-class founders who are solving the \$8.5tn skills gap. Emerge is backed by strategics such as Cambridge University Press, Cambridge Assessment and Jisc, as well as the founders of globally renowned Edtech companies. Together, we are building the future of learning.

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About FutureLearn

FutureLearn is a leading social learning platform jointly owned by The Open University and The SEEK Group. FutureLearn partners with over a quarter of the world's top universities and has over 14 million users taking short online courses, microcredentials, and undergraduate and postgraduate degrees that improve their working lives.

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